

In the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously presented) A functional multilayer film comprising a matrix comprising laminating metal-arranged thin films, each metal-arranged thin film comprising a dielectric thin film having a predetermined thickness and a plurality of fine metallic bodies arranged on the dielectric thin film, wherein a plurality of recesses is regularly formed on a surface of each dielectric thin film and the fine metallic bodies are arranged in lower parts of the recesses.

2. (Currently Amended) A functional multilayer film according to Claim 1, wherein the dielectric thin film and the fine metallic bodies are made of different materials in at least one of every each metal-arranged thin film ~~or in~~ and every a region including a plurality of the metal-arranged thin films.

3. (Withdrawn) A method for manufacturing a functional multilayer film comprising:

forming a plurality of recesses arranged on a surface of a dielectric thin film;

forming a metal-arranged thin film by forming a metallic thin film on the dielectric thin film, and performing a heat treatment on the metallic thin film such that metal of the metallic thin film flows into lower parts of the recesses of the dielectric thin film to form fine metallic bodies; and

forming a matrix by laminating a plurality of the metal-arranged thin films, each comprising the dielectric thin film and the fine metallic bodies.

4. (New) A functional multilayer film according to Claim 1, wherein at least one of the dielectric thin film and the fine metallic bodies are made of different materials in each metal-arranged thin film.

5. (New) A functional multilayer film according to Claim 1,

wherein at least one of the dielectric thin film and the fine metallic bodies are made of different materials in a region including a plurality of the metal-arranged thin films.

6. (New) A functional multilayer film according to Claim 1,
wherein the dielectric film is made of different materials in each metal-arranged thin film.
7. (New) A functional multilayer film according to Claim 1,
wherein the fine metallic bodies are made of different materials in each metal-arranged thin film.
8. (New) A functional multilayer film according to Claim 1,
wherein the dielectric film is made of different materials in a region including a plurality of the metal-arranged thin films.
9. (New) A functional multilayer film according to Claim 1,
wherein the fine metallic bodies are made of different materials in a region including a plurality of the metal-arranged thin films.
10. (New) The functional multilayer film according to Claim 1,
wherein a first multilayer filter is disposed on a top surface of the matrix, and a second multilayer filter is disposed on a bottom surface of the matrix.
11. (New) The functional multilayer film according to Claim 10,
wherein the first and the second multilayer filters are narrow bandwidth reflection filters.
12. (New) The functional multilayer film according to Claim 1,
wherein the fine metallic bodies arranged in a surface direction of a first layer of the metallic multilayer film are aligned with the fine metallic bodies arranged in a surface direction of a second later of the metallic multilayer film in at least one of a direction of the surface of the first layer and a direction orthogonal to the surface of the surface of the first layer.

13. (New) The functional multilayer film according to Claim 1, wherein the fine metallic bodies are formed in an elliptical shape.

14. (New) The functional multilayer film according to Claim 13, wherein the elliptically-shaped fine metallic bodies are oriented in a regular pattern.

15. (New) A functional multilayer film, comprising:
metal-arranged thin films,
wherein the metal-arranged thin films are fabricated by a process comprising:
forming a plurality of recesses arranged on a surface of a dielectric thin film;
forming a metallic thin film on the dielectric thin film, and performing a heat treatment on the metallic thin film such that metal of the metallic thin film flows into lower parts of the recesses of the dielectric thin film to form fine metallic bodies; and
laminating a plurality of the metal-arranged thin films, each metal-arranged thin film comprising the dielectric thin film and the fine metallic bodies.

16. (New) The functional multilayer film according to Claim 15,
wherein the dielectric film comprising a first dielectric film and a second dielectric film and a thickness of the first dielectric film and a thickness of the second dielectric film are the same.

17. (New) The functional multilayer film according to Claim 16,
wherein the arrangement of the fine metallic bodies in a lamination direction and in a surface direction of the metal-arranged film is regular.

18. (New) The functional multilayer film according to Claim 15,
wherein the recess shape is at least one of conical, ellipsoidal, quadrangular pyramidal, triangular pyramidal, cylindrical, semispherical, and square.

19. (New) The functional multilayer film according to Claim 18,

wherein a distance between adjacent fine metallic bodies in the lamination direction is the same and a distance between adjacent fine metallic bodies in the surface direction is the same.

20. (New) The functional multilayer film according to Claim 15,
wherein the recesses of a first dielectric thin film are formed by deposition of the dielectric thin film on a substrate having recesses.